



The Spectrum

Newsletter of the Rocky Mountain Chapter

March 2008

Letter from the President

Rocky Mountain Colleagues,

First, the Board would like to thank all of you for a great 2007; we look forward to serving you in 2008.

I will give a quick up date on the elections, we as the Board want to thank all the candidates for showing an interest in the chapter, and I invite all the candidates to join us during the board meetings this year, your insight is greatly needed. Newly elected to the board this year is Steve Brown from Comcast. Welcome Steve!!! We have several re-elected board members, Pat Wike- Technetix, Rex Kohart Comcast and Nick Segura Charter Communications, Nick will serve as our Chapter Secretary of the Board. All of the members have excellent experience that will and have added value to the SCTE/ Rocky Mountain Chapter. For many of you, you may not realize there is a great amount of work required to be the Secretary for our Chapter, Nick is a big part of our Chapter's success; so please if you see Nick thank him for doing an awesome job.

Our strategic planning session was very important to assist our Chapter in lining out the topics that you all want to see or learn about over the next year. The board members had received feedback from many of you on desired new topics and continuation of established subjects. We had a lively discussion on what we needed to cover. We will have 2 of our 8 seminars outside of Denver. They will be in the Western Slope, and Colorado Springs. We are going to continue with the popular Digital Measurements, IP, and return path topics. We are also going to turn our focus on SVD/IP (Switched Video-IP) side of the technology. We are also going to be covering DOCSIS 3.0, and a much requested Home Theater, Networking seminars. You will also hear our board members talking before each seminar on ways our members can augment their leadership capabilities. This is an interest that has been voiced by many of our professionals. As our teams expand their technical skills, the ability to apply them with an intuitive leadership style is an important need now being noticed throughout our operations.

(Please see the below schedule for a breakdown of this coming year's activity)

As mentioned our Rocky Mountain show Symposium will be September 16th, and 17th 2008. We are looking forward to another record breaking year, last year we had 69 Cable Games Participants, and I also want to thank all of the Comcast and US cable Leadership that jumped in to help us get everybody through the events. This year we will have everybody who wants to participate, we will pre- register so we can have our vendors be prepared.

So as you can see we have hit the New Year running. We are off to a great start to a year that will prove to be a busy and exciting time for our Chapter members. We'll see you at up coming events.

Thanks,
Dave Krook

Also, visit our website at: <http://chapters.scte.org/rockymtn/>

2008 - UPCOMING SEMINARS and TESTING OPPORTUNITIES!

Pre-seminar openers (10 to 15 minutes) are planned before each event and subjects will include:

INTRODUCTION OF THE LATEST INDUSTRY RELATED ELECTRONICS WIDGETS.
SCHOLARSHIP OPPORTUNITIES, PROFESSIONAL DEVELOPMENT, BENEFITS OF CERTIFICATION, AND TELECOM INDUSTRY SAFETY MESSAGES.

Date	Location	subject	Speaker
March 27 th	Iliff Comcast	Tap to TV	Ron Hranac, Cisco Systems
May 8 th	CableLabs	SD Broadcast / SDV	TBD
June 5 th	Jones/NCTI	IP Basics	TBD
July 15 th	Grand Junction	Digital Testing & Meas MER/BER	TBD
July 16 th	Denver	Digital Testing & Meas MER/BER	TBD
July 17 th	CO springs	Digital Testing & Meas MER/BER	TBD
August 7 th	Charter	Home Theatre/Home Networking & MoCA	TBD
September 16 th & 17 th Symposium lunch	Inverness	Digital Transition & Killer Applications	TBD
October 2 nd	CableLabs	DOCSIS 3.0 and touch on IPV6	TBD
Nov 6 th	Charter	Tools and Troubleshooting (OSS, utilization of CPE, GIS)	TBD
January 22, 2009	Iliff	Business services	TBD

2008 Elected Board of Directors

<u>Name</u>	<u>Email</u>	<u>Company</u>	<u>Position</u>	<u>Phone Number</u>
Dave Krook	David_Krook@cable.comcast.com	Comcast	President	303-603-2095
Alan Babcock	ABabcock@jonesncti.com	Jones / NCTI	Vice President	303-797-9393
Steve Murphy	Steve_Murphy@cable.comcast.com	Comcast	Treasurer	720-267-3038
Nick Segura	Nick.Segura@chartercom.com	Charter Comm.	Secretary	303-669-3705
Steve Brown	Steve_Brown4@cable.comcast.com	Comcast	Board	720-267-2654
Joe Thomas	JThomas@everstream.com	Everstream	Board	303-953-1386
Pat Wike	Pat.Wike@Technetix.com	Technetix	Board & Symposium Dir	303-603-5052
Rex Kohart	Rex_Kohart@cable.comcast.com	Comcast	Board	303-603-5639
Sherisse Hawkins	sherisse.hawkins@twcable.com	Time Warner	Board	720-279-2810
Frank Eichenlaub	frank.eichenlaub@sciatl.com	Cisco	Board, WebMaster, Region II Director	303-790-6659

“Friends” of the Board 2008

Definition: Somebody who supports the functions of the local chapter by participating in meetings, provides input that helps drive board decisions, volunteers as a speaker, possibly financially supportive, and generally those who make an impact through their involvement.

<u>Name</u>	<u>email</u>	<u>Company</u>	<u>Position</u>	<u>Phone Number</u>
Tom Gorman	Tom.Gorman@chartercom.com	Charter	Friend and SCTE Chair	303-323-1482
Dave Robinson	drobenson@evisearch.com	EquiVision	Friend and Newsletter editor	303-722-8920
Randy Bailey	RandyB3@comcast.net	CO Springs School Dist 11	Friend	719-520-2488
Jim Garcia	Edwin_Garcia@cable.comcast.com	Comcast	Friend	719-457-4517
Robert Kostelny	rob.kostelny@comcast.net	DTI	Friend	303-995-6689
Richard Covell	rgcovell@msn.com	TTSI	Friend & Speaker	303-646-5050
Hugh Long	Hugh_Long@cable.comcast.com	Comcast	Friend	720-267-3026
Mark Thompson	thompson@commscope.com	Commscope	Friend	303-773-3003
Jim Feola	ifeola@comcast.net	Field Services	Friend	303 841-3391
Jim Stewart	jim_stewart2@cable.comcast.com	Comcast	Friend & Tech Writer	303-603-5687
Steve Snider	stephen_snider@cable.comcast.com	Comcast	Friend & Speaker	303-603-2167
Joe O'Fallon	Joe.OFallon@adc.com	ADC	Friend	
Brook Queen	BQueen@evolutionbb.com	Evolution	Friend	303-717-8830

SCTE Rocky Mountain Chapter

Meeting Notice

Ensuring Reliable Data and Voice on the Outside Plant

When? **March 27th, 2008**
8:30 AM to 9 AM – Morning registration
9:00 AM to 12: 00 PM – Morning seminar
12:00 PM to 1:00 PM – Lunch
12:40 PM to 1:05 PM – Afternoon registration
1:05 PM to 4:05 PM – Afternoon Seminar

Where? **Comcast Regional Office (West entrance – Theatre)**
8000 East Iliff
Denver, CO. 80231

What? **Ensuring reliable services**

“What does it take in the outside plant to ensure reliable video, data and voice services? Cisco’s Ron Hranac discusses recommended performance parameters and how to measure them, including a variety of test equipment screen shots and the how and why behind those measurements.”

Speakers: **Ron Hranac, Technical Leader, Broadband Marketing, Cisco Systems, Inc.**

Hugh Long will provide an introductory session on **“how does this affect you?”**

There will be certification testing available. First-timers must pre-register 48 hours in advance. Register here:

<http://www.scte.org/content/index.cfm?pID=1186>

Please RSVP if you plan on testing so we can bring in enough PC’s.

“Certification demonstrates to a candidate's peers and company management that they have the initiative to acquire knowledge and improve their skills and abilities”.

How Much? Free for current Local Chapter Participants!

\$10 for Non-Local Chapter Participants; this includes 1-year access to all Chapter training seminars and events. Lunch is provided.

Please contact

Rex Kohart: (303) 603-5639 Rex_Kohart@cable.comcast.com, or

Steve Brown: (720) 267-2654 Steve_Brown4@cable.comcast.com, or

Pat Wike: (303) 883-8978 Pat.Wike@Technetix.com with any questions.

Also, visit our website at: <http://chapters.scte.org/rockymtn/>

Tech Forum

Welcome back to “The Tech’s Forum”. This section of the SCTE newsletter features articles and tips for technical personnel of the CATV Industry. Ideas and articles for “The Tech’s Forum” are always welcome. If you would like to contribute please contact me at jim_stewart2@cable.comcast.com.

In the last several editions of “The Tech’s Forum”, we discussed the theory behind the testing and analysis of digital signals/data streams. In this edition we will expand our discussion and share some quick references that will help you perform those tests.

The first reference I would like to share is a link to a handy find and fix chart from the JDSU website.

http://www.jdsu.com/test_and_measurement/technical_resources/product_documents/posters/hfcfindfix.po.cab.tm.ac.pdf

The next two references contain guidelines in regards to acceptable levels at certain points of the CATV plant.

BER Targets

Recommended Pre-FEC BER and Post-FEC BER measurements at various system locations:

Location	Pre-FEC BER	Post-FEC BER
CMTS or Modulator	0 x 10 ⁻⁰	0 x 10 ⁻⁰
Laser	1 x 10 ⁻⁹	0 x 10 ⁻⁰
Node	1 x 10 ⁻⁸	0 x 10 ⁻⁰
Drop or End-of-Line	1 x 10 ⁻⁷	1 x 10 ⁻⁹

MER Targets

Recommended MER measurements at various system locations:

Digital Data		Downstream MER		Upstream SNR	
		64 QAM	256 QAM	QPSK	16 QAM
Headend	Excellent	38	38	25	28
	Acceptable	34	35	22	25
	Marginal	32	34	19	22
Node	Excellent	35	35		
	Acceptable	33	34		
	Marginal	30	32		
Tap	Excellent	33	35		
	Acceptable	31	33		
	Marginal	28	30		
CPE	Excellent	32	35		
	Acceptable	29	32		
	Marginal	26	28		